

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (withdrawn): Apparatus for generating an electronic signal in response to selected wavelengths of light comprising:

a first photodiode for converting at least the selected wavelengths of light to a corresponding first electronic signal;

a second photodiode for converting at least additional wavelengths of light to a corresponding second electronic signal; and

a circuit for manipulating the first and second electronic signals to generate an output signal in response to the selected wavelengths of light.

Claim 2 (withdrawn): Apparatus according to claim 1 wherein the first and second photodiodes are provided with a spectral sensitivity differential.

Claim 3 (withdrawn): The apparatus of claim 1, wherein the first and second photodiodes have dissimilar optical thicknesses.

Claim 4 (withdrawn): The apparatus of claim 1 wherein at least one photodiode is configured for converting visible light to an electronic signal.

Claim 5 (currently amended): Apparatus for generating an electronic signal in response to selected wavelengths of light, comprising:

a first photodiode for converting light to a corresponding first electronic signal;

a second photodiode for converting the light to a corresponding second electronic signal;  
a circuit for manipulating the first and second electronic signals to generate an output signal  
in response to the light;

one of either the first silicon photodiode or the second photodiode having ~~The apparatus of~~  
~~claim 1 wherein one photodiode has an optical thickness of about 7.0 micrometers; and~~

and the other silicon photodiode having an optical thickness of about 3.5 micrometers;  
further comprising a circuit operable to multiply the first electronic signal by the ratio of the optical  
thicknesses of the second photodiode to the first photodiode to obtain a first product;

and thereafter, the circuit operable to subtract the second electronic signal from the first  
product, so as to obtain a reduced long wavelength response in the near infra-red and a resultant  
spectral response similar to a human eye.

Claim 6 (withdrawn): The apparatus of claim 1 wherein one photodiode has an optical thickness of about 3.5 micrometers.

Claim 7 (withdrawn): The apparatus of claim 1 wherein the circuit for manipulating the first and second signals comprises an arithmetic logic circuit.

Claim 8 (currently amended): The apparatus of claim ~~4~~ 5 wherein the circuit for manipulating the first and second signals comprises a scaling function ~~circuit~~.

Claim 9 (withdrawn): Apparatus for generating an electronic signal in response to selected wavelengths of light comprising:

a first sensor for converting at least the selected wavelengths of light to a corresponding first electronic signal;

a second sensor for converting at least additional wavelengths of light to a corresponding second electronic signal; wherein the first and second sensors are provided with a spectral sensitivity differential; and

a circuit for manipulating the first and second electronic signals to generate an output signal in response to the selected wavelengths of light.

Claim 10 (withdrawn): The apparatus of claim 9 wherein the first and second sensors further comprise first and second photodiodes having dissimilar optical thicknesses.

Claim 11 (currently amended): Apparatus for generating an electronic signal in response to light comprising:

a first sensor for converting the light to a corresponding first electronic signal;

a second sensor for converting the light to a corresponding second electronic signal; wherein the first and second sensors are provided with a spectral sensitivity differential;

a circuit for manipulating the first and second electronic signals to generate an output signal in response to the light;

The apparatus of claim 9 wherein one the first sensor comprising a first silicon photodiode with has an optical thickness of about 7.0 micrometers; and

the second sensor comprising a second silicon photodiode with an optical thickness of about 3.5 micrometers.

Claim 12 (currently amended): The apparatus of claim 11 9 wherein ~~one photodiode has an optical thickness of about 3.5 micrometers.~~ further comprising a circuit operable to multiply the first electronic signal by the ratio of the optical thicknesses of the second photodiode to the first photodiode to obtain a first product;

and thereafter the circuit operable to subtract the second electronic signal from the first product, so as to obtain a reduced long wavelength response in the near infra-red and a resultant spectral response similar to a human eye.

Claim 13 (withdrawn): The apparatus of claim 9 wherein the circuit for manipulating the first and second signals comprises an arithmetic logic circuit.

Claim 14 (currently amended): The apparatus of claim ~~11~~ 9—wherein the circuit for manipulating the first electronic signal and the second electronic signals comprises a scaling function circuit.

Claim 15 (withdrawn): The apparatus of claim 9 wherein at least one sensor comprises a circuit for converting visible light to an electronic signal.

Claim 16 (withdrawn): A method of generating an electronic signal corresponding to selected wavelengths of light, the method comprising the steps of:

converting at least first and second wavelength ranges of light into first and second electronic signals wherein at least one of the wavelength ranges includes the selected wavelengths; and

manipulating the first and second electronic signals to generate an output signal corresponding to the selected wavelengths of light.

Claim 17 (withdrawn): The method according to claim 16 wherein the converting step further comprises the steps of:

converting a first wavelength range of light, including at least the selected wavelengths of light, to a corresponding first electronic signal; and

converting a second wavelength range of light, including at least wavelengths distinct from the selected wavelengths of light, to a corresponding second electronic signal.

Claim 18 (withdrawn): The method according to claim 16 further comprising the step of using a differential between the first electronic signal and the electronic second signal to generate the output signal.

Claim 19 (withdrawn): The method according to claim 16 further comprising the step of selecting first and second wavelength ranges which partially overlap.

Claim 20 (withdrawn): The method according to claim 16 wherein the selected wavelengths comprise visible light.

Claim 21 (new) The apparatus of claim 5 wherein the circuit for manipulating the first and second signals comprises an arithmetic logic circuit.

Claim 22 (new) The apparatus of claim 5, wherein the multiplication of the first electronic signal by the ratio of optical thicknesses of the second photodiode to the first photodiode and the subtraction of the second electronic signal from the result of the multiplication operation is performed using one or a plurality of analog current mirrors.

Claim 23 (new) The apparatus of claim 5 wherein the first photodiode and the second photodiode are made of silicon.

Claim 24 (new) The apparatus of claim 5 wherein the first photodiode and the second photodiode are made of a semiconductor material other than silicon.

Claim 25 (new): The apparatus of claim 11 wherein the circuit for manipulating the first electronic signal and second electronic signal comprises an arithmetic logic circuit.